

South West NRM On-Ground Project Fact Sheet

Improving pastures with High intensity grazing at "Gumahah"

Landholder Name: Rick Gardiner

Property Location & Lot on Plan: "Gumahah" 1KU59, 3KU59, 2KU60, 5KU32, 3KU34, 7KU10, 4KU60

Property Outline:

(E.g. Property description, size in hectares, enterprise, annual rainfall, and current management practice)

"Gumahah" is 40,393 ha consisting of Hard Mulga (33%), Soft Mulga (25%), Mulga Sandplains (22%), Dissected Residuals (14%) and clay plans and seasonal lakes (4%). "Gumahah" has been owned by the Gardiner family since 1940 and Rick Gardiner has managed the property for the past 18 years.

The Carrying Capacity Study (DPI) rates "Gumahah" at 13.6 acres for 1 DSE (Dry Sheep Equivalent), with a total average carry capacity of 7564 DSE. Overall this has been improved with 20,000acres of newly pulled country. But has also seen a huge increase in woody weeds and mulga regrowth since the drought has ended with above average rainfall for "Gumahah" in 2009/2010.

Rick currently runs only a few sheep; and periodically takes up to 5000 sheep on adjistment; and runs 600 cattle, with a good supply of goats that are mustered and removed regularly.

This trial will be of interest to many land managers across the mulga lands of western Queensland; mulga thickening coupled with reduced pasture robustness does and will continue to impact on the economic viability of many grazing businesses. This trial may give some tools to those looking for help to improve soil health and pastures on their properties.





Q2 Coasts and Country

This project is supported by South West NRM through funding from the Queensland Government's Q2 Coasts and Country and Australian Government's Caring for Our Country.

Project Description

The "Gumahah" project will fund fencing material to set up paddocks to allow Rick Gardiner, South West NRM and the Learning Group to investigate the effects of intensive grazing in the Mulga lands. The project will set up 5 paddocks with fencing suitable to hold goats. Paddocks will be approx. 68ha, 91 ha, 30 ha, 69 ha, and 16 ha. There is some fencing existing and some that needs only upgrading and the rest will be new fencing. Two paddocks have bore drains; two paddocks will have new troughs.

The second part of the project may include fire, mechanical or other methods aimed at improving pastures, but these activities will be based on weather and money availability at the time.

South West NRM will fund \$25,000 towards the cost of the project in 2010/2011, with all other costs funded by cash and in-kind contributions from Rick Gardiner.

Project Aim

The Mulga Lands has been in drought conditions for the past 10 years, while there are some good productive grasses regenerating since the 2009/2010 rains, the mulga regrowth and young seedlings are going very well also.

This trial will attempt to reduce the impact of the woody weeds and mulga, and increase perennial grasses in diversity and density, therefore increasing productivity. Grazing will be the main tool used to stimulate grass production, as well as some mechanic methods.

The proposed paddocks have some perennial grass species already but ground cover is very low.

The aim is to graze each paddock with goats only for the minimum amount of days it takes to grass each perennial grass plant. Stock will then be moved on to next paddock or moved out of the trial area. We will run the trial as per holistic grazing principals.

Any mechanical treatments will be subjected to planned grazing, i.e. if grasses are seeded, the area be managed as per these holistic grazing principals also.

This trial will be watched closely by a reference group of landholders and they will be involved in all parts of the trial, including the planning stage and monitoring the outcomes.

Project Outcomes

This project will graze stock (goats) in each trial paddock, moving to next paddock based on the availability of perennial grasses; therefore resting all other paddocks, we hope to see an increase in ground cover and an improvement in perennial grass species over time.

When grass improves we hope to achieve an increase in Grazing days per hectare per DSE, which would increase turnover and production.

All data will be recorded and available during field days and critically reviewed by SWNRM and other landholders from the Paroo River Catchment. We will facilitate discussions about the advantages and problems faced when setting up and using rotational grazing.

Formal monitoring sites with photo and grass percentage data will allow other landholders to see the results of planned grazing.

Outputs

- **CB 1.1 Events;** 1 field day in conjunction with local landholders; expect 10 land managers to attend.
- **CB1.2 Project Fact Sheet;** 2 Factsheets produced and distributed to 100 land managers.
- **CB1.4 Media opportunities;** 1 news article written to promote adoption of planned grazing in the Mulga lands.
- **OG14.4 Ground Cover Management;** 274 hectares with planned grazing by one land manager and directly influencing 40,393 ha and 10 other land holders.
- **CB5.1** Establish 4 grazing learning sites. One established Learning Site at "Gumahah"
- **P3.2** Property management plans; 1 management plan with mapping for "Gumahah".
- **P5.1 Biophysical, economic or social plans;** 1 Monitoring and Evaluation plan.

Project Monitoring:

Objectives:

Monitor ground cover response, presence of pasture species and diversity, and reduction of woody weeds. Assess benefits of planned grazing and any other activities for holistic outcomes.

Transfer of knowledge and skills of holistic management to the learning group.

Methodology & Indicators:

Indicators: P3 pasture species, rainfall, grazing days and land condition, number of landholders attending learning days.

Methodology: 'Stocktake' photo and Land Condition monitoring and grazing charts. Number of landholders attending learning days and participating in discussions and planning of grazing on their own property.

Monitoring Schedule:

Establish baseline data prior to commencement of the project.

The landholder has agreed to assist with project collaboration and holistic data analysis of the project. The initial collection and onforwarding to South West NRM of rainfall and production monitoring data (e.g. grazing days / location etc. incorporating actual rest periopds for each paddock, yields: stock days / ha, stocking rate). This has to be collected daily and weekly.

Biophysical monitoring every six months in which South West NRM will be responsible for collecting, collating, interpreting and reporting data (Feb and Aug).

Two pasture monitoring transects considering pasture species and ground cover established within the trial project area.

16 photo monitoring sites, at least two within each paddock of the "Gumahah" Trial.

Analysis: Return on Investment. Develop a case study on the return on investment of the rotational grazing system monitored under this project, and consider the holistic outcomes – economic, environmental and lifestyle.

Analysis: Has the learning group participated in discussions about planned holistic grazing and changed any management on their own properties?